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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,316	06/23/2006	Toshihiro Oki	292920US0PCT	9808
22850 7590 05/19/2010 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER CHEUNG, WILLIAM K				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
05/19/2010		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/584,316

Applicant(s)

OKI ET AL.

Examiner

WILLIAM K. CHEUNG

Art Unit

1796

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/26/2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-8 and 10-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-8 and 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the amendment filed April 26, 2010, claims 3, 4, 9 have been cancelled. Claims 1, 5-8, 10-15 are pending.
2. In view of the amendment filed April 26, 2010, the rejection of claims 1-15 under 35 U.S.C. 102(b) as being anticipated by Baeck et al. (EP 0 297 673) as affirmed by Jayawant (US 3,860,694), is withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

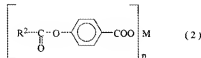
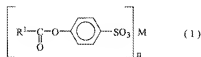
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1, 5-8, 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baeck et al. (EP 0 297 673) as affirmed by Jayawant (US 3,860,694) in view of Storm et al. (GB 1 400 898).

Claim 1 (currently amended) A softening detergent composition comprising:

- (a) 1 to 30% by mass of a clay mineral of montmorillonite;
- (b) 0.5 to 20% by mass of a sodium carbonate-hydrogen peroxide adduct;
- (c) 0.1 to 20% by mass of a compound represented by the following general formula (1)
 or (2):



wherein R^1 is an alkyl group having 4 to 13 carbon atoms; R^2 is an alkyl group having 5 to 13 carbon atoms; M is a hydrogen atom, or an alkali metal atom, an alkaline earth metal atom, an ammonium or an alkanolamine, with proviso that when M is an alkaline earth metal atom, n is 2, and that when M is an alkali metal atom, an ammonium or an alkanolamine, n is 1,

or a combination of both; and

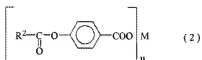
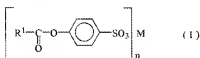
- (d) 0.4 to 20 wt. % by mass of a salt of a fatty acid; and
 a component corresponding to a surfactant other than component (d) which comprises 35-70 % by mass of an alkylbenzenesulfonate; and

10 to 60% by mass of a component corresponding to a surfactant as prescribed in JIS K 1362:1998,

wherein a mass ratio of the component (b) to the component (c) [component (b)/component (c)] is from 3/4 to 20/1.

6. (currently amended) A method of enhancing softening effect of a clay mineral against a fibrous manufactured article, comprising the step of applying to the fibrous manufactured article,

- (a) a clay mineral of montmorillonite;
- (b) a sodium carbonate-hydrogen peroxide adduct; and
- (c) a compound represented by the following general formula (1) or (2):



wherein R¹ is an alkyl group having 4 to 13 carbon atoms; R² is an alkyl group having 5 to 13 carbon atoms; M is a hydrogen atom, or an alkali metal atom, an alkaline earth metal atom, an ammonium or an alkanolamine, with proviso that when M is an alkaline earth metal atom, n is 2, and that when M is an alkali metal atom, an ammonium or an alkanolamine, n is 1.

or a combination of both; and

- (d) a salt of a fatty acid; and

a component corresponding to a surfactant other than component (d) which comprises 35-70 % by mass of an alkylbenzenesulfonate.

in mass ratios satisfying:

the component (b)/the component (c) = 3/4 to 20/1, and

the component (a)/the component (c) = 35/1 to 1/5.

Baeck et al. (page 7-8, Table, Composition II) disclose a composition that meets all the features of claims 1-8. Regarding claims 6-8, Baeck et al. (abstract) clearly teach using the disclosed composition as a fabric softening materials. Regarding the claimed alkylbenzenesulfonate, Baeck et al. (page 3, line 29) clearly teach the use of alkylbenzenesulfonate in an amount ranges from 5 to 40% (page 3, line 41).

Applicants must recognize that fabrics are inherently fibrous materials. Regarding the "coated granule" feature of claim 13, applicants must recognize that Baeck et al. (page 8, Table) clearly disclose the use of sodium sulfate and Hectorite clay in the amount as required by the claims. Since Baeck et al. have taught the composition as claimed, the examiner has a reasonable basis to believe that the claim 13 has been met by Baeck et al. Applicants must recognize that the claimed invention relates to "a composition", where the coating itself carries very little weight in the patentability of the claimed invention.

Regarding the claimed "water" and the amounts, Baeck et al. (page 10, Table) clearly disclose composition having the amount of water as claimed.

Regarding the claimed "sodium carbonate-hydrogen peroxide adduct", Baeck et al. (page 4, line 39-41) disclose it is suitable to include alkali-metal percarbonate into the disclosed composition. Further, Baeck et al. (page 4, line 42) clearly indicate that sodium is the alkali-metal. Since sodium percarbonate is basically same as (or considered as) an adduct of sodium carbonate-hydrogen peroxide which is affirmed by Jayawant, the examiner has a reasonable basis to believe that the claimed "sodium carbonate-hydrogen peroxide adduct" has been met by Baeck et al.

The difference between Baeck et al. and claims 1, 5-8, 10-15 is that Baeck et al. do not indicate that Montmorillonite as the preferable smectic clay for the disclosed compositions.

However, Baeck et al. (page 2, line 4-7) clearly indicate that the teachings of Storm et al. which represent the background art of the claimed invention that teaches

the non-preferable smectic clay, montmorillonite. Therefore, in view of substantially identical endeavors of developing detergents systems, it would have been apparent to one of ordinary skill in art with specific direction from Baeck et al. to review the teachings of Storm et al. relating to the clay teachings of Baeck et al. Since Storm et al. (page 10, line 33-35) clearly teach the functional equivalence of clays such as montmorillonite and hectorite, in view of the substantially identical endeavor of developing detergents systems, it would have been obvious to one of ordinary skill in art to replace the hectorite of Baeck et al. with montmorillonite as taught in Storms to obtain the invention being claimed. Applicants must also recognize that the teachings of a prior art is not limited to its preferable embodiments or teachings.

Applicant's arguments filed April 26, 2010 have been fully considered but they are not persuasive. Applicants argue that the claims are allowable because Baeck et al. do not teach the specific type of smectic clay, montmorillonite as claimed. However, the examiner disagrees because Baeck et al. (page 2, line 4-7) clearly indicate that the teachings of Storm et al. which represent the background art of the claimed invention that teaches the non-preferable smectic clay, montmorillonite. Therefore, in view of substantially identical endeavors of developing detergents systems, it would have been apparent to one of ordinary skill in art with specific direction from Baeck et al. to review the teachings of Storm et al. relating to the clay teachings of Baeck et al. Since Storm et al. (page 10, line 33-35) clearly teach the functional equivalence of clays such as montmorillonite and hectorite, in view of the substantially identical endeavor of developing detergents systems, it would have been obvious to one of ordinary skill in art

to replace the hectorite of Baeck et al. with montmorillonite as taught in Storms to obtain the invention being claimed. Applicants must also recognize that the teachings of a prior art is not limited to its preferable embodiments or teachings.

5. Claims 1, 5, 6, 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Baker et al. (US 2002/0128165) for the reasons adequately set forth from paragraph 5 of the office action of August 20, 2009, as affirmed by Jayawant (US 3,860,694).

Baker et al. (page 11-13, Composition I) disclose a composition (which comprises bentonite clay) that meets all the features of claims 1, 5, 6, 7. Regarding the claimed amount of alkylbenzenesulfonate, Baker et al. (page 6, 0089, line 3, and 8-9) clearly teach an amount up to 50 weight percent of alkylbenzene sulphonate. Regarding the claimed "montmorillonite", Baker et al. (page 10, 0170) clearly indicate that montmorillonite clays are particularly preferred and also the preferred are bentonite clays. In view of such teachings, it would be apparent to one of ordinary skill in art to recognize and appreciate the interchangeability between montmorillonite and bentonite clays as taught in the disclosed compositions. Therefore, the claimed "montmorillonite" feature has been met by Baker et al.

Regarding the method of claims 6, 7, Baker et al. (page 1, 0014) clearly teach using the disclosed composition for use in automatic laundry or for washing fabrics which are inherently fibrous materials. Claims 1, 5, 6, 7 are anticipated.

Regarding the claimed "sodium carbonate-hydrogen peroxide adduct", Baker et al. (page 3, 0051) disclose it is suitable to include alkali-metal percarbonate into the disclosed composition. Further, Baker et al. (page 3, 0051) clearly indicate that sodium

is the alkali-metal. Since sodium percarbonate is basically same as (or considered as) an adduct of sodium carbonate-hydrogen peroxide which is affirmed by Jayawant (col. 3, line 25-51), the examiner has a reasonable basis to believe that the claimed "sodium carbonate-hydrogen peroxide adduct" has been met by Baker et al. Claims 1, 5, 6, 7 are anticipated.

Applicant's arguments filed April 26, 2010 have been fully considered but they are not persuasive. Applicants argue that there is a typographical error in "their specification". However, it argument is unclear because the prior art cited do not have page 19 or 40. After reviewing applicants' specification, it seems that applicants are referring "their specification" as "applicants' specification". Regarding applicants' comments that page 40 (lines 13-14) of applicants' specification and the Kubota declaration filed April 27, 2009 report the use of "Laundrosil DGA 212 (a bentonite clay)" when in actuality that montmorillonite clay was used, Applicants have not provided any evidence to support that such errors have been made.

Regarding the claimed amount of alkylbenzenesulfonate, Baker et al. (page 6, 0089, line 3, and 8-9) clearly teach an amount up to 50 weight percent of alkylbenzene sulphonate. Regarding the claimed "montmorillonite", Baker et al. (page 10, 0170) clearly indicate that montmorillonite clays are suitable replacement for bentonite (page 10, 0170).

In view of the reasons set forth above, the rejections are proper.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **WILLIAM K. CHEUNG** whose telephone number is (571)272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William K Cheung/
Primary Examiner, Art Unit 1796

William K. Cheung, Ph. D.
Primary Examiner
May 13, 2010